
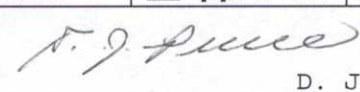

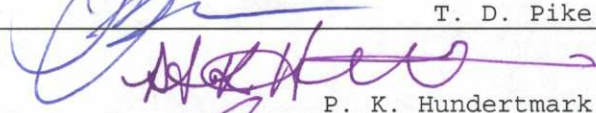




<b>Engineering Change Request/Notice</b>		<b>Number</b>		<b>E</b>	<b>038-0004</b>
<b>Number of attached pages</b>		0			
<b>Project</b>	MACS	<b>Affected Release Number(s):</b>			
<b>Originator</b>	Collin Broholm	I	038-xxxx	S	038-0008
<b>Date</b>	March 16, 2004	I	038-xxxx	S	038-0011
				R	038-xxxx
<b>Scope</b>					
Change of materials requirements in the vicinity of the neutron beam					
<b>Purpose</b>					
Ensure that materials choices close to the neutron beam reflect the ALARA policy for radiation exposure.					
<b>Description</b>					
The following guideline shall be added to the white beam conditioning system and the monochromator cask specifications: Any item that satisfies the following criteria shall be shielded or fabricated from materials that do not develop long lifetime activation components when exposed to neutrons: (1) the item is exposed to or has a direct albeit perpendicular non-shielded view of the MACS neutron beam (2) The item does not itself serve as a significant source of shielding (3) Extraction for repairs or to gain access may occur over a ten year period. Structural materials that do activate: Steel, Stainless steel. Example of a structural material that does not activate: Aluminum. When in doubt consult with Collin Broholm.					
<b>Impact (add more sheets if necessary)</b>					
<b>Performance</b>		<b>Schedule</b>		<b>Budget</b>	
The change will facilitate maintenance consistent with ALARA. There will be a slight decrease in shielding efficiency. However, judiciously applied the effect will be minimal.		No impact on schedule as there are no changes on items that are already in manufacturing.		No significant impact.	
<b>Change Board (from Release)</b>		<b>Disposition</b>		<input type="checkbox"/> approved	<input type="checkbox"/> disapproved
1	 T. D. Pike	6	 D. J. Pierce	<b>E</b>  <b>038-0003</b> 	
2	 P. K. Hundertmark	7	 S. A. Smee		
3	 C. Broholm	8			
4	 M. C. English	9			
5	 N. C. Maliszewskyj	10			